

**REMARKS**

This is responsive to the Office Action dated February 20, 2002.

Claim 8 stands rejected under 35 U.S.C. § 251 as being an improper recapture of broadened claimed subject matter surrendered in the application for patent upon which the present reissue is based. With respect to amended claim 8, the rejection is respectfully traversed.

Claim 8 covers the embodiment of Fig. 3 (original claim 27) wherein the pressure plate has a first portion and a second portion and the insulating member is disposed between the first and second portion. Claim 8 as amended and presented for reissue is **narrower** in scope than **cancelled** claim 27. Cancelled claim 27 did not contain the following limitations which are present in reissue claim 8:

- The pressure plate has a protrusion which extends axially in the direction of the membrane spring and
- the insulating member is disposed at said protrusion and
- the second portion of the pressure plate forms part of the protrusion and is disposed between the insulating member and the membrane spring and
- the insulating member is a single, on-piece element which extends circumferentially about the pressure plate.

Thus, reissue claim 8 is **narrower** than cancelled claim 27<sup>1</sup>. Under these circumstances, the recapture rule does not apply at all. *Clement*, 45 U.S.P.Q.2d at 1165 ("in contrast, a reissue claim narrower in scope escapes the recapture rule entirely. ").

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<sup>1</sup> See *In re Wadlinger*, 181 U.S.P.Q. 826, 830 (CCPA 1974); *In re Petrow*, 159 U.S.P.Q. 449, 451 (CCPA 1968); *In re Willingham*, 127 U.S.P.Q. 211 (CCPA 1960); *Mentor Corp. v. Colorplast, Inc.*, 27 U.S.P.Q.2d 1521, 1525 (Fed. Cir. 1993) ("Reissue claims that are broader in certain respects and narrower in others may avoid the effect of the recapture

According to the analysis set forth in *In re Clement*, the first step in applying the recapture rule is to determine whether and in what "aspect" the reissue claim is broader than the patent claim. Here, the reissue claim is broader and narrower in regard to an aspect (the definition of the insulating member) that directly relates to the rejection of the original claim. The fact that the claim is broader is no issue since reissue was sought within the two year statutory period. On the other hand, the fact that the reissue claim is narrower in an aspect that directly relates to the rejection of the cancelled claim, renders the recapture rule inapplicable in this case. In other words, the fact that the reissue claim is broader than the patent claim only means that reissue must be sought within two years after grant of the original patent. Reissue claims that are broader in scope than the patent claims can, of course, be obtained. *Mentor* at 1525 ("Reissue claims that are broader in certain respects and narrower in others may avoid the effect of the recapture rule."). The second step of the analysis, according to *Clement* is to determine whether the applicant surrendered particular subject matter when the claim was cancelled. There is nothing in the file history which would tend to show that applicant intentionally surrendered certain subject matter. To the contrary, when applicant's attorney elected allowable subject matter he stated that "applicant retains the right to pursue broader claims under 35 U.S.C. § 120" (Amendment dated September 29, 1997 at page 16, Paper No. 16).

Accordingly, it is respectfully submitted that the rejection of claim 8 under 35 U.S.C. § 251 should be withdrawn and the same is hereby respectfully urged.

Turning now to the rejection of claim 8 under 35 U.S.C. § 102(a) and (e) as anticipated by Hayes '704, it is pointed out that claim 8 is directed to the embodiment of Fig.

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rule."); *In re Clement*, 45 U.S.P.Q.2d 1161, 1165 (Fed. Cir. 1997).

3, i.e. the embodiment wherein the heat insulating member is sandwiched between a first and a second portion of the pressure plate. Hayes neither discloses nor suggests such construction. Accordingly, Hayes fails to disclose or suggest a pressure plate having a first and second portion and wherein the second portion of the pressure plate is disposed between the insulating member and the membrane spring. Of course, Hayes also fails to disclose or suggest an insulating member that is a circumferentially complete ring, i.e. is a single one-piece element extending circumferentially about the pressure plate as claimed. It is thus respectfully submitted that the rejection of claim 8 based on Hayes under 35 U.S.C. § 102(a) and (e) should be withdrawn and the same is hereby respectfully solicited.

Claims 5-7 stand rejected under 35 U.S.C. § 103(a) as being obvious over Maycock et al. (EP 02 35 882) in view of Reik et al ('710) and Heid et al. ('120). The rejection is respectfully traversed.

Maycock EP '882 discloses a **resilient** fulcrum ring 42 to cushion the clutch during reengagement (see Office Action page 5 "A one-piece wire ring is interposed between the pressure plate and the spring in the Maycock et al. device for providing cushioning".) To this end, portions 42A of the ring 42 are **resiliently deformed** by ribs 46 of the diaphragm spring 10 as the diaphragm spring 10 increasingly urges the pressure plate during clutch re-engagement. There is no teaching or suggestion in Maycock et al. of (1) a **rigid** member for minimizing heat conduction from the pressure plate to the spring and (2) there is no teaching or suggestion in Maycock et al. of the different thermal conductivity of the membrane spring and the fulcrum ring.

Maycock et al. is all about **cushioning** of the clutch re-engagement by providing a **resiliently deformable** fulcrum ring. Not only is there no motivation to change the fulcrum

Serial No.: 09/587,058

ring from resiliently deformable to rigid, but Maycock et al. teach against having a rigid fulcrum ring as a rigid ring would not provide any of the cushioning effects desired by Maycock et al. The teaching and the motivation that is lacking from Maycock et al. is also not provided by Reik et al. and Heid et al. Reik et al. are not concerned about the effect of excessive heat on the diaphragm spring, but Reik et al. relates to protecting the anti-friction bearing 15 by surrounding it with a thermal barrier 24. Thermal barrier 24 is composed of two L-shaped rings which are certainly not configured to minimize the contact between the rings and the adjacent elements of the clutch as claimed by applicant herein.

Thus, Reik et al. are silent about a heat insulating member or element located between the pressure plate and the diaphragm spring.

Also Heid et al. is directed to the protection of clutch springs, the Heid clutch is structurally very different from the clutch of the present application. For one, the Heid clutch does not have a diaphragm spring and, therefore, provides no suggestion or teaching on how to protect a diaphragm spring from excessive heat.

Moreover, the way Heid et al. protect their springs from excessive heat is very different from the claimed clutch. In Heid et al. the springs are shielded by metal cups and ring 26 or gasket 30 made of heat insulating material like asbestos. In fact, in the Heid et al. construction it is mostly the air between the cups and the springs together with the heat insulating ring or gasket which prevents excessive heating of the clutch springs due to friction.

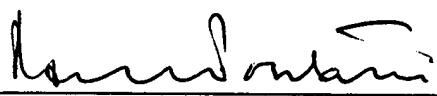
There is no suggestion in Reik et al. and Heid et al. on how to protect a diaphragm spring from excessive heat. Consequently, there is no suggestion of how to modify Maycock et al. to arrive at the clutch claimed in the instant application. Hence, it is

Serial No.: 09/587,058

respectfully submitted that the rejection based on Maycock et al. in view of Reik et al. and Heid et al. should be withdrawn and allowance of claims 1-8 is respectfully urged.

It is believed that no fees or charges are required at this time in connection with the present application; however, if any fees or charges are required at this time, they may be charged to our Patent and Trademark Office Deposit Account No. 03-2412.

Respectfully submitted,  
COHEN, PONTANI, LIEBERMAN & PAVANE

By   
Thomas C. Pontani  
Reg. No. 29,763  
551 Fifth Avenue, Suite 1210  
New York, New York 10176  
(212) 687-2770

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AMENDMENTS TO THE CLAIMS SHOWING CHANGES

In the Claims:

8. (Twice Amended) A single disc friction clutch for a motor vehicle, said friction clutch comprising:

a clutch housing;

a clutch disc;

said single clutch disc being configured to be mounted on a transmission input shaft having a longitudinal axis;

said single clutch disc being configured to be axially movable along the longitudinal axis of a transmission input shaft;

a pressure plate;

at least one friction lining mounted on said clutch disc;

said at least one friction lining being configured to be disposed between said pressure plate and a flywheel;

said pressure plate being configured and disposed to engage and disengage said clutch disc with a flywheel;

said pressure plate being configured and disposed to be axially movable along the longitudinal axis of a transmission input shaft;

a membrane spring;

said membrane spring being disposed between said clutch housing and said pressure plate;

said membrane spring being configured and disposed to bias said pressure plate;

said pressure plate comprising a first portion and a second portion;  
said first portion of said pressure plate being disposed to contact said clutch disc;  
said second portion of said pressure plate being disposed away from said clutch disc;  
a thermal insulating member being configured to minimize heat conduction from said pressure plate to said membrane spring;

said pressure plate having a protrusion extending axially in the direction of said membrane spring;

said insulating member being disposed at said protrusion between said membrane spring and said first portion of said pressure plate;

said second portion of said pressure plate forming part of said protrusion and being disposed between said insulating member and said membrane spring to contact said membrane spring;

said insulating member being rigid and comprising a metal and being a single, one-piece element extending circumferentially above said pressure plate;

said metal of said insulating member being configured to minimize heat conduction from said first portion of said pressure plate to said membrane spring to minimize distortion of

said membrane spring from thermal conduction of heat from said pressure plate to said membrane spring.